

I CLAIM:

1) A method for purging accumulated liquids from within and around a well bore in a petroleum well comprising the steps of:

shutting off the well for a period of time to allow pressure to build up;

fractionally opening the well for a period of time to allow the built up pressure to cause the accumulated liquids in and around the well bore to migrate to within the production tubing of the well; and then,

fully opening the well flow line to purge the collected liquid hydrocarbons from within the production tubing.

2) A method as in claim 1 further comprising the step of positioning a flow rate measurement device in the well flow line.

3) A method as in claim 2 further comprising the step of monitoring and timing the well flow to thereby assess the volume of petroleum flowing from within the formation into the production tubing.

4) A method as in claim 2 further comprising the step of positioning a multi-positional control valve in the well flow line to facilitate a selected fractional opening of the well flow line.

5) A method as in claim 4 wherein the control valve is motorized.

6) A method as in claim 4 further comprising the step of positioning a pressure monitoring device on the well side of the control valve.

7) A method as in claim 1 wherein the well is fractionally opened until between 50 to 150% of the critical flow rate is achieved.

8) A method as in claim 1 wherein the well is fractionally opened until the burst flow rate is achieved.

9) A method as in claim 8 wherein after the burst flow rate is maintained for a predetermined time, the valve is positioned to maintain a predetermined stabilization rate of flow before the valve is fully opened.

10) A method as in claim 1 further comprising the step of positioning a plunger in a bottom portion of the production tubing prior to fractionally opening the well so that the accumulated liquids will collect above the plunger and subsequent purging will be more efficient.

11) A method as in claim 9 further comprising the step of positioning a flow rate measurement device in the well flow line.

12) A method as in claim 10 further comprising the step of monitoring and timing the well flow to thereby assess the volume of petroleum flowing from within the formation into the production tubing.

13) A method as in claim 11 further comprising the step of positioning a multi-positional control valve in the well flow line to facilitate a selected fractional opening of the well flow line.

14) A method as in claim 12 wherein the control valve is motorized.

15) A method as in claim 11 further comprising the step of positioning a pressure monitoring device on the well side of the control valve.

16) A method as in claim 10 wherein the well is fractionally opened until between 50 to 150% of the critical flow rate is achieved.

17) A method as in claim 10 wherein the well is fractionally opened until the burst flow rate is achieved.

18) A method as in claim 17 wherein the burst flow rate is maintained for a predetermined time, and thereafter the valve is positioned to maintain a predetermined stabilization rate of flow before the valve is fully opened.